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Forward di-muon spin asymmetries in PHENIX JIN HUANG, Los Alamos National Lab, PHENIX COLLABORATION — Di-muon pairs, which are produced from J/Ψ decay and the Drell-Yan process in high energy longitudinally polarized proton-proton collisions, provide insight into the proton spin structure. J/Ψ mesons are predominantly produced through gluon-gluon fusion and therefore provide unique information about the gluon polarization. At the same time the spin asymmetries of the Drell-Yan process are sensitive to the sea-quark polarization at small-x. Forward di-muon production ($1.2 < |\eta| < 2.4$) is being studied in the PHENIX experiment at RHIC. High statistics di-muon measurements were carried out in the most recent run 2012 (Run12) at $\sqrt{s} = 510$ GeV in p+p collisions. The new Forward Silicon Vertex Detector (FVTX), enabled us to explore the Drell-Yan process in detail for the first time at RHIC. The current status of di-muon asymmetry analysis using the PHENIX Run12 data will be presented in this talk.

Jin Huang
Los Alamos National Lab

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